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# (54) Remote control platform

United Kingdom

John Dewes Hayward
Victor Reginald Hart

(74) Agent and/or Address for Service
John Dewes Hayward

2 Lansdowne Road, Muswell Hill, LONDON, N10 2AU,

(57) A remote controlled mobile platform comprises wheels, motors, batteries and guidance system. It can be fixed a variety of toys and other objects by means of locating points in order to move them around. The platform has four wheels and can be activated by radio, infra red or computer. By means of hand controllers two or more platforms can be operated at the same time so that, for instance, toys may be raced against one another. Children can use the platform to build movable vehicles. Also, the platform can be used with various toy block construction systems.

Existing electronic remote control toys have to have their own individual wheels, motors, batteries and controls but with this invention a range of toys and other objects can be fitted to the platform in turn.

# REMOTE CONTROL PLATFORMS

The present invention relates to a remote control battery powered wheeled platform which represents the core component for a whole range of toys and games developments.

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The platform is designed to accommodate and mobilise several toy/game elements. Two or more platforms can be operated at the same time.

- 10 The platforms can be moved by any suitable remote control eg radio, infra red, using joysticks or suitable control knobs, levers, buttons and/or keys, or magnetic polarity switches.
  - 15 Existing electronic remote control toys have to have their own individual wheels, motors, batteries and controls.

The present invention seeks to provide easily
transferable mobility technology with wheels,
electric motor, battery power and control guidance
system incorporated in the remote control platform
which can be placed directly underneath the object
or pieces to be moved/activated or possibly inserted
into a recess in the underside of the object.

In a preferred embodiment, the surface detail of the platform can include locating pegs for action figures feet and round castileations that 30 are compatible with a number of construction block systems also locating holes/studs and any clips that are necessary for clip-on accessories. Also the platform can include electro magnetic devices.

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The platforms size, power and gearing will be related to the existing/planned range of use.

In a preferred arrangement the standard size

40 platform will be cigarette pack sized, approx.

105mm x 60mm x 25mm, capable of moving, by way
of example only, items from a collection of pieces
including fighters, jousters, workers, animals,
vehicles and various themes. Also capable of

45 interfacing with various toy construction block
systems.

An advantage of the platform/s is that they would be the basis for additional accessorization.

That is once the player/s has the platform/s they would be able to use attachments to extend the playvalue of the platform/s. These attachments would fit onto the platform and could be simple vacuum formings or injection moulded parts.

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This ability to add to and change the character of the platform means that low-priced accessories update and refresh the toys/games fashion opportunities, whilst the platform itself continues to support 60 the core brand.

The platform can also be computer controlled and may incorporate suitable microchips.

65 Apart from toys and games the platform may also be used for moving other objects such as magnets, light attachments, power take offs, running string lines and for other industrial purposes.

- A wheel-driven, remote controlled, mobile platform [1] with one drive axle [5] and one steered axle [6] having several raised profiles and locating points [2 & 3] to accommodate various toys, brackets and other items which are to be mobilised. Approximately cigarette-pack sized the platform incorporates electric motor, battery power and control guidance system. It may be activated by any suitable remote control system egradio, infra red or computer and may include suitable microchips.
- A mobile platform as claimed in Claim 1 wherein said raised profiles and locating pins permit toy components like construction blocks, bricks, connectable extrusions and metal pressings to be located and held as part of the platform.
- A mobile platform as claimed in Claim 1 wherein said locating pins may formloose elements, but connectable to the platform, forming removable accessories to be used in conjunction with specific items to be attached and mobilised. These may include brackets/connectors to hold for example dolls, torches magnets, paper, card, plastic and metal mouldings or solar panels.
- A mobile platform as claimed in Claim 1 wherein the remote control unit [10] is a one-piece moulded, radio transmitter, formed with a 'living' hinge [11], a snap-fit closure [12], worked by one or more buttons activating the transmitter to mobilise the platform's receiver.
- A mobile platform as claimed in Claim 1 wherein, in its simplest version, steering is mechanically affected in direct relation to the platform's movement. That is, in a forward direction, the platform turns in a constant radial arc; in reverse it moves in a straight line or vice versa. More sophisticated versions would have proportional speed and proportional steering.





**Application No:** 

GB 9600087.2

Claims searched: 1 - 5

Examiner:

Roger Casling

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Patents Act 1977
Search Report under Section 17

# Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.O): A6S

Int Cl (Ed.6): A63H

Other:

# Documents considered to be relevant:

| Category | Identity of document and relevant passage |   | Relevant<br>to claims |
|----------|---|---|-----------------------|
| x        | GB 2234687 A                              | (TOMY) see whole document                               | 1 - 5                 |
| x        | US 4764150                                | (SHIGEO UCHINO) see column 2 line 40 to column 4 line 9 | 1 - 5                 |
| х        | US 4406085                                | (MATTEL) see column 3 line 13 to column 6 line 30       | 1 - 5                 |
| х        | US 4208834                                | (MANDO) see column 2 line 63 to column 4 line 3         | 1 - 5                 |

X Document indicating lack of novelty or inventive step
 Y Document indicating lack of inventive step if combined with one or more other documents of same category.

<sup>&</sup>amp; Member of the same patent family

A Document indicating technological background and/or state of the art.
 P Document published on or after the declared priority date but before the filing date of this invention.

E Patent document published on or after, but with priority date earlier than, the filing date of this application.